



59th Medical Wing Science and Technology Summary of Funding Announcements for August 2021





Table of Contents

CON	NGRESSIONALLY DIRECTED MEDICAL RESEARCH PROGRAMS (CDMRP)	3
	FY21 Kidney Cancer Research Program (KCRP)	3
	FY21 Lupus Research Program (LRP)	
	FY21 Melanoma Research Program (MRP)	
	FY21 Multiple Sclerosis Research Program (MSRP)	
	FY21 Neurotoxin Exposure Treatment Parkinson's Research Program (NETP)	
	FY21 Prostate Cancer Research Program (PCRP)	6
	FY21 Reconstructive Transplant Research Program (RTRP)	
	FY21 Traumatic Brain Injury & Psychological Hlth Research Program (TBIPHRP)	
Dom	nestic Preparedness Support Initiative	g
	Antonio Military Medical Innovation (SAMMI) Fund	
	RDA's Division of Research, Innovation & Ventures (DRIVe) Easy	
	Medical Technology Enterprise Consortium (MTEC)	
	Funding Opportunities Specific to COVID-19	
	tinuously Open Broad Area Announcement (BAA)	





CONGRESSIONALLY DIRECTED MEDICAL RESEARCH PROGRAMS (CDMRP)

- FY21 Kidney Cancer Research Program (KCRP)
 - Kidney Cancer Research Program Academy of Kidney Cancer Investigators Early-Career Investigator Award
 https://cdmrp.army.mil/funding/pa/FY21-KCRP-AKCIECIA.pdf
 https://cdmrp.army.mil/funding/pa/FY21-KCRP-AKCIECIA.pdf
 - Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 14, 2021 Application Submission Deadline: 11:59 p.m. ET, October 5, 2021 End of Application Verification Period: 5:00 p.m. ET, October 7, 2021 Peer Review: November/December 2021 Programmatic Review: February 2022
 - Kidney Cancer Research Program Clinical Research Nurse Development Award

https://cdmrp.army.mil/funding/pa/FY21-KCRP-CRNDA.pdf
The CDMRP expects to allot approximately \$0.96M to fund approximately two Clinical Research Nurse Development Award applications

- Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 14, 2021 Application Submission Deadline: 11:59 p.m. ET, October 5, 2021 End of Application Verification Period: 5:00 p.m. ET, October 7, 2021 Peer Review: November/December 2021 Programmatic Review: February 2022
- Kidney Cancer Research Program Clinical Trial Award
 https://cdmrp.army.mil/funding/pa/FY21-KCRP-CTA.pdf
 The CDMRP expects to allot approximately \$12.8M to fund approximately four Clinical Trial Award applications
 - Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 14, 2021 Application Submission Deadline: 11:59 p.m. ET, October 5, 2021 End of Application Verification Period: 5:00 p.m. ET, October 7, 2021 Peer Review: November/December 2021 Programmatic Review: February 2022
- FY21 Lupus Research Program (LRP)
 - Lupus Research Program Idea Award
 https://cdmrp.army.mil/funding/pa/FY21-LRP-IA.pdf
 The CDMRP expects to allot approximately \$1.2M to fund approximately four Idea Award applications
 - Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), August 24, 2021 Application Submission Deadline: 11:59 p.m. ET, September 22, 2021 End of Application Verification Period: 5:00 p.m. ET, September 27, 2021 Peer Review: November 2021 Programmatic Review: February 2022





- Lupus Research Program Impact Award
 https://cdmrp.army.mil/funding/pa/FY21-LRP-IPA.pdf
 The CDMRP expects to allot approximately \$5.25M to fund approximately seven Impact Award applications
 - Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), August 24, 2021 Application Submission Deadline: 11:59 p.m. ET, September 22, 2021 End of Application Verification Period: 5:00 p.m. ET, September 27, 2021 Peer Review: November 2021 Programmatic Review: February 2022
- Lupus Research Program Transformative Vision Award https://cdmrp.army.mil/funding/pa/FY21-LRP-TVA.pdf
 https://cdmrp.army.mil/funding/pa/FY21-LRP-TVA.pdf</
 - Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), August 24, 2021 Application Submission Deadline: 11:59 p.m. ET, September 22, 2021 End of Application Verification Period: 5:00 p.m. ET, September 27, 2021 Peer Review: November 2021 Programmatic Review: February 2022

• FY21 Melanoma Research Program (MRP

- Melanoma Research Program Melanoma Academy Leadership Award https://cdmrp.army.mil/funding/pa/FY21-MRP-MALA.pdf

 The CDMRP expects to allot approximately \$2.08M to fund approximately one Melanoma Academy Leadership Award application
 - Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 9, 2021 Application Submission Deadline: 11:59 p.m. ET, September 28, 2021 End of Application Verification Period: 5:00 p.m. ET, October 5, 2021 Peer Review: December 2021 Programmatic Review: March 2022
- Melanoma Research Program Mid-Career Accelerator Award https://cdmrp.army.mil/funding/pa/FY21-MRP-MCAA.pdf
 https://cdmrp.arm
 - Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 9, 2021 Application Submission Deadline: 11:59 p.m. ET, September 28, 2021 End of Application Verification Period: 5:00 p.m. ET, October 5, 2021 Peer Review: December 2021 Programmatic Review: March 2022





- Melanoma Research Program Team Science Award
 https://cdmrp.army.mil/funding/pa/FY21-MRP-TSA.pdf
 The CDMRP expects to allot approximately \$3.36M to fund approximately three TSA applications
 - Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 9, 2021 Application Submission Deadline: 11:59 p.m. ET, September 28, 2021 End of Application Verification Period: 5:00 p.m. ET, October 5, 2021 Peer Review: December 2021 Programmatic Review: March 2022
- Melanoma Insert Research Program Translational Research Award https://cdmrp.army.mil/funding/pa/FY21-MRP-TRA.pdf The CDMRP expects to allot approximately \$1.92M to fund approximately two TRA applications and \$2.24M to fund approximately two TRA – Collaborator Option applications.
 - Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 9, 2021 Application Submission Deadline: 11:59 p.m. ET, September 28, 2021 End of Application Verification Period: 5:00 p.m. ET, October 5, 2021 Peer Review: December 2021 Programmatic Review: March 2022
- FY21 Multiple Sclerosis Research Program (MSRP)
 - Multiple Sclerosis Research Program Early Investigator Research Award https://cdmrp.army.mil/funding/pa/FY21-MSRP-EIRA.pdf
 The CDMRP expects to allot approximately \$1.9M to fund approximately six EIRA Award applications
 - Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 7, 2021 Application Submission Deadline: 11:59 p.m. ET, October 1, 2021 Confidential Letters of Recommendation Submission Deadline: 5:00 p.m. ET, October 6, 2021 End of Application Verification Period: 5:00 p.m. ET, October 6, 2021 Peer Review: December 2021 Programmatic Review: February 2022
- FY21 Neurotoxin Exposure Treatment Parkinson's Research Program (NETP)
 - Neurotoxin Exposure Treatment Parkinson's Program Early Investigator Research Award https://cdmrp.army.mil/funding/pa/FY21-NETP-EIRA.pdf
 The CDMRP expects to allot approximately \$2.0M to fund approximately five Early Investigator Research Award applications.
 - Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 8, 2021 Confidential Letters of Recommendation Submission Deadline: 5:00 p.m. ET, October 4, 2021 Application Submission Deadline: 11:59 p.m. ET, September 29, 2021 End of Application Verification Period: 5:00 p.m. ET, October 4, 2021 Peer Review: December 2021 Programmatic Review: February 2022





- Neurotoxin Exposure Treatment Parkinson's Program Investigator-Initiated Research Award
 - https://cdmrp.army.mil/funding/pa/FY21-NETP-IIRA.pdf

The CDMRP expects to allot approximately \$3.6M to fund approximately three Investigator Initiated Research Award applications

- Neurotoxin Exposure Treatment Parkinson's Program Synergistic Idea Award
 Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 8, 2021
 Application Submission Deadline: 11:59 p.m. ET, September 29, 2021
 End of Application Verification Period: 5:00 p.m. ET, October 4, 2021
 Peer Review: December 2021
 Programmatic Review: February, 2022
 https://cdmrp.army.mil/funding/pa/FY21-NETP-SIA.pdf
 The CDMRP expects to allot approximately \$9M to fund approximately three Synergistic Idea Award applications
 - Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 8, 2021 Application Submission Deadline: 11:59 p.m. ET, September 29, 2021 End of Application Verification Period: 5:00 p.m. ET, October 4, 2021 Peer Review: December 2021 Programmatic Review: February 2022
- FY21 Prostate Cancer Research Program (PCRP)
 - Prostate Cancer Research Program Idea Development Award
 https://cdmrp.army.mil/funding/pa/FY21-PCRP-IDA.pdf
 The CDMRP expects to allot approximately \$36.0M to fund approximately 30 Idea Development Award applications
 - Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 2, 2021 Application Submission Deadline: 11:59 p.m. ET, September 23, 2021 End of Application Verification Period: 5:00 p.m. ET, September 28, 2021 Peer Review: November 2021 Programmatic Review: January 2022
 - Prostate Cancer Research Program Clinical Consortium Award https://cdmrp.army.mil/funding/pa/FY21-PCRP-CCA.pdf
 https://cdmrp
 - Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 2, 2021 Application Submission Deadline: 11:59 p.m. ET, September 23, 2021 End of Application Verification Period: 5:00 p.m. ET, September 28, 2021 Peer Review: November 2021 Programmatic Review: January 2022





- FY21 Reconstructive Transplant Research Program (RTRP)
 - Reconstructive Transplant Research Program Investigator-Initiated Research Award

https://cdmrp.army.mil/funding/pa/FY21-RTRP-IIRA.pdf
The CDMRP expects to allot approximately \$6.125M to fund approximately seven Investigator-Initiated Research Award applications

• Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 15, 2021 • Invitation to Submit an Application: October 2021 • Application Submission Deadline: 11:59 p.m. ET, December 8, 2021 • End of Application Verification Period: 5:00 p.m. ET, December 13, 2021 • Peer Review: January 2022 • Programmatic Review: March 2022

Reconstructive Transplant Research Program Advanced Technology Development Award

https://cdmrp.army.mil/funding/pa/FY21-RTRP-ATDA.pdf
The CDMRP expects to allot approximately \$4.5M to fund approximately four Advanced Technology Development Award applications

• Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 15, 2021 • Invitation to Submit an Application: October 2021 • Application Submission Deadline: 11:59 p.m. ET, December 8, 2021 • End of Application Verification Period: 5:00 p.m. ET, December 13, 2021 • Peer Review: January 2022 • Programmatic Review: March 2022

- FY21 Traumatic Brain Injury and Psychological Health Research Program (TBIPHRP)
 - Clinical Research Development Award
 https://cdmrp.army.mil/funding/pa/FY21-TBIPHRP-CRDA.pdf
 The CDMRP expects to allot approximately \$3M to fund approximately 10 FY21 TBIPHRP Clinical Research Development Award applications
 - Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 8, 2021 Application Submission Deadline: 11:59 p.m. ET, September 30, 2021 End of Application Verification Period: 5:00 p.m. ET, October 5, 2021 Peer Review: December 2021 Programmatic Review: February 2022

Clinical Trial Award

https://cdmrp.army.mil/funding/pa/FY21-TBIPHRP-CTA.pdf
The CDMRP expects to allot approximately \$58.5M to fund approximately 14
Research Level 1, 12 Research Level 2, and 2 Research Level 3 FY21 TBIPHRP
CTA proposals/ applications

- Pre-Proposal/Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 15, 2021 Invitation to Submit a Proposal/Application: October 22, 2021
- Proposal/Application Submission Deadline: 11:59 p.m. ET, December 16, 2021 •





End of Proposal/Application Verification Period: 5:00 p.m. ET, December 21, 2021 • Peer Review: February 2022 • Programmatic Review: April 2022

Focused Program Award

https://cdmrp.army.mil/funding/pa/FY21-TBIPHRP-FPA.pdf
The CDMRP expects to allot approximately \$40.0M to fund approximately five FY21
TBIPHRP FPA proposals/applications

- Pre-Proposal/Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET),
 September 15, 2021 Invitation to Submit a Proposal/Application: October 22, 2021
 Proposal/Application Submission Deadline: 11:59 p.m. ET, December 16, 2021 End of Proposal/Application Verification Period: 5:00 p.m. ET, December 21, 2021 Peer Review: February 2022 Programmatic Review: April 2022
- Idea Development Award

https://cdmrp.army.mil/funding/pa/FY21-TBIPHRP-IDA.pdf
The CDMRP expects to allot approximately \$5.4M to fund approximately 18 FY21
TBIPHRP Idea Development Award applications

• Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 8, 2021 • Application Submission Deadline: 11:59 p.m. ET, September 30, 2021 • End of Application Verification Period: 5:00 p.m. ET, October 5, 2021 • Peer Review: December 2021 • Programmatic Review: February 2022

o Investigator-Initiated Research Award

https://cdmrp.army.mil/funding/pa/FY21-TBIPHRP-IIRA.pdf

The CDMRP expects to allot approximately \$11.25M to fund approximately 15 FY21 TBIPHRP Investigator-Initiated Research Award applications

• Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 8, 2021 • Application Submission Deadline: 11:59 p.m. ET, September 30, 2021 • End of Application Verification Period: 5:00 p.m. ET, October 5, 2021 • Peer Review: December 2021 • Programmatic Review: February 2022

Translational Research Award

https://cdmrp.army.mil/funding/pa/FY21-TBIPHRP-TRA.pdf
The CDMRP expects to allot approximately \$36M to fund approximately 24 FY21 TBIPHRP Translational Research Award applications.

Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 15, 2021
 Invitation to Submit an Application: October 22, 2021
 Application Submission Deadline: 11:59 p.m. ET, December 16, 2021
 End of Application Verification Period: 5:00 p.m. ET, December 21, 2021
 Peer Review: February 2022
 Programmatic Review: April 2022





Domestic Preparedness Support Initiative

Defense Lab Funding Opportunities

Particular technologies of interest:

Locate and identify firefighters in buildings that contain fire, chemical hazards, or structural damage.

Safe and secure transport of highly toxic chemicals and illegal drugs in both small and bulk quantities.

Emerging technologies to enhance EMS personnel during real-world events.

Personal Protective Equipment appropriate to first responders.

Technologies that protect and enhance law enforcement mission capabilities.

Funding Opportunities: \$100,000 -\$350,000 in research support from DPSI. Send a 1-3 page summary of the technology to the POCs listed at right no later than 1 SEP 21.

The Defense Intrepid Network Announces the Translating Research into Practice (TRIP) Initiative!

Across the Defense Intrepid Network for TBI and Brain Health, our mission is to improve the lives of patients and families impacted by traumatic brain injury (TBI) and associated health conditions through integrated clinical practice, research, and education. Our vision is to be the global-leading network for TBI and brain health clinical care, research, and education for military members and beneficiaries.

Today, we are proud to announce the official launch of the Translating Research into Practice (TRIP) initiative. The TRIP initiative's primary objective is to support, through collaboration and partnership, the translation of effective research outcomes into clinical standards of care for the improvement of brain health and management of patients with TBI.

TRIP goals include:

- * Creating a Network-wide platform to systematically surveil TBI research initiatives, evaluating research outcomes that will influence clinical best practices, and identifying research findings that lead to engagement with definitive clinical trials;
- * Building research partnerships across the global TBI community to gain greater access to and rapidly implement effective care modalities for TBI and Brain Health;
- * Enhancing accessibility to and improving processes for pursuing research-funding opportunities through strategic partnerships; and,
- * Strengthening the Defense Intrepid Network's execution of vital research initiatives to continually demonstrate its value within the Department of Defense and United States Government.

Through this initiative, we will foster and strengthen relationships across the Defense Intrepid Network, the Department of Defense, interagency, academia, industry, international organizations, and civil society to more rapidly identify, access, and implement effective care modalities. One of the ways we will do this is through TRIP Scientific Community Groups, which





will bring together clinicians, researchers, and other subject matter experts from across the global TBI community. Effective research must go beyond scientific journals; it must make its way into the hands of clinicians, directly impacting the standard of patient care.

To stay up-to-date on the TRIP initiative, please follow us on social media and share our posts.

Facebook: @NationalIntrepidCenterofExcellence

Twitter: @NICoEPage

LinkedIn (NEW!): https://www.linkedin.com/company/nicoe

For additional information on the TRIP initiative, please contact TRIP Coordinator Dr. Theresa Woo at dha.bethesda.j-11.mbx.trip@mail.mil . Thank you, and we look forward to working with you on this initiative.

San Antonio Military Medical Innovation (SAMMI) Fund

San Antonio is home to a unique concentration of innovative military medical research and comprehensive healthcare capability. The San Antonio Military Medical Innovation (SAMMI) Fund was created in 2019 to accelerate the commercialization of products and services of interest to the military medical community.

The SAMMI Fund makes investments in local early-stage companies to stimulate research and development activities directly aimed at commercializing valuable tools needed by those responsible for providing medical care to our service members.

The investments, up to fifty thousand dollars each, are made on a competitive basis twice a year via a Convertible Promissory Note or other debt or equity investment vehicle as appropriate. Previous recipients of SAMMI finding include GaitIQ, Inc., Renovo Concepts, Inc., EmergenceMed LLC and Allosense, Inc.

Applications are now being accepted through the end of April 2021. Companies interested in applying can find more information about the Fund and the application process on the San Antonio Military Medical Innovation (SAMMI) Fund webpage: https://www.sanantonio.gov/EDD/SAMMIFund

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Potential applicants should contact SAMMI Director, Dr. Corey Levenson (corey@saedc.org), who can provide suggested guidelines regarding preparation of Statements of Interest. There will also be two on-line info/Q&A sessions to be presented on 6 April 2021 from 2-3 pm and 15 April 2021 from 10-11 am. Please contact Corey if you are interested in receiving an evite to either of these sessions.





BARDA's Division of Research, Innovation & Ventures (DRIVe) Easy

 Broad Agency Announcement https://beta.sam.gov/opp/a93347912ee54559b9bbbd98106a0cd4/view

Open throughout the year

The Patient-Centered Outcomes Research Institute (PCORI)

An independent nonprofit, nongovernmental organization in Washington, DC, was authorized by Congress in 2010 to answer many of the questions patients and their clinicians face daily.

PCORI's mandate is to improve the quality and relevance of evidence available to help patients, caregivers, clinicians, employers, insurers, and policy makers make better-informed health decisions. To do this, we work with those healthcare stakeholders to identify critical research questions and answer them through comparative clinical effectiveness research, or CER, focusing on outcomes important to patients. We also disseminate the results in ways that members of the healthcare community will find useful.

Since December 2012, PCORI has funded hundreds of studies that compare healthcare options to learn which works best, given patients' circumstances and preferences.

As the largest public research funder that focuses primarily on CER, we issue funding announcements several times each year that call for proposals for CER projects.

PCORI includes patients and other healthcare stakeholders throughout the research process, so the resulting evidence will address their most important questions and concerns. PCORI provides awards to encourage engagement of patients and other healthcare stakeholders in CER.

In addition, as directed by authorizing law, PCORI funds research to develop and improve CER methods. CER methods matter when it comes to producing valid and trustworthy information that will lead to better healthcare decisions and, ultimately, improved patient outcomes.

For more information, visit PCORI at https://www.pcori.org/funding-opportunities

Open PCORI Funding Announcements (PFAs)

Broad PCORI Funding Announcements -- Cycle 3 2021

- Key Dates: Letter of Intent (LOI): October 5, 2021 at 5pm ET, Letter of Intent (LOI): October 5, 2021 at 5pm ET
- Type: Research Award
- Total Costs: Addressing Disparities; Assessment of Prevention, Diagnosis, and Treatment Options; and Improving Healthcare Systems: up to \$3 million (Small) up to \$5 million (Large) — Communication & Dissemination Research: up to \$2 million





Improving Methods for Conducting Patient-Centered Outcomes Research -- Cycle 3 2021

 Key Dates: Letter of Intent (LOI): October 5, 2021 at 5pm ET, Letter of Intent (LOI): October 5, 2021 at 5pm ET

Type: Research AwardTotal Costs: \$750.000

The Medical Technology Enterprise Consortium (MTEC)

https://www.mtec-sc.org/

Pre-Announcement:

Military Prototype Advancement Initiative (MPAI) RPP https://www.mtec-sc.org/solicitations/#Upcoming-Solicitations

The Medical Technology Enterprise Consortium (MTEC) is excited to post this announcement for a Request for Project Proposals (RPP) to solicit current MTEC members for a broad range of medical prototype technological and knowledge solutions related to the Focus Areas of Interest (also called "Focus Area(s)") listed below. Proposed solutions may include medical techniques, knowledge products, and materiel (medical devices, drugs, and biologics).

Focus Area #1: Prolonged Field Care Focus Area #2: Medical Readiness Focus Area #3: Emerging Technologies Focus Area #4: Maximizing Human Potential

Focus Area #5: Applied Medical Robotics and Machine Perception and

Intelligence Systems

Background

In multi-domain operations, today's operating force will be overwhelmed with casualties, the ability to evacuate will be limited, first responders and medics will struggle with limited resources and ability to achieve the "Golden Day", resulting in operational units and commanders rapidly losing freedom of maneuver and combat effectiveness. Therefore, medical assets must be highly mobile and more dispersed (e.g., smaller, more modular medical units), Warfighters will require greater self-sufficiency and autonomy (e.g., may have more limited medical-related communications and re-supply), and there will be an increased cognitive and physical stress on Warfighters (they will need ways to maximize lethality and return to the fight quickly).

Unique Features of this RPP

MTEC is utilizing a streamlined solicitation approach to award for this broad, multiple focus area RPP to solicit and fund a wide range of projects of varying scope and maturity levels under the MPAI. This solicitation mechanism has been implemented for the following reasons and has several unique features noted below:

Increase information exchange between the MTEC membership and the military Provide feedback to the MTEC membership

Establish an open window for the military to make awards





Solicit for key areas to support achievement of the US Army Medical Research and Development Command (USAMRDC) strategic objectives

Diversity in potential Sponsors

Minimum Requirements for Submission of an Enhanced White Paper

Enhanced White Papers submitted in response to this RPP shall meet the following minimum requirements:

- 1. Support readiness and care in future battlefield scenarios
- 2. Fit the prototype definition
- 3. Minimum Knowledge/Technology Readiness Level (KRL/TRL) is at 3
- 4. Focus on proposed solutions that have not been submitted to MTEC under previous RPPs within the past 2 years.
- 5. Align to a Specified Focus Area of Interest

Focus Areas of Interest

FOCUS AREA #1: Prolonged Field Care (PFC): A primary emphasis in 2021 is to identify and develop medical techniques, knowledge products, and materiel (medical devices, drugs, and biologics) for early intervention in life-threatening battle injuries and prolonged field care (PFC). Because battlefield conditions impose severe constraints on available manpower, equipment, and medical supplies available for casualty care, there is a need for medical interventions that can be used within the battle area or as close to it as possible, before or during medical evacuation. Preferred medical techniques and materiel that can be used by combat medics must be easily transportable (i.e., small, lightweight, and durable in extreme environments and handling); devices must be easy to use and require low maintenance, with self-contained power sources as necessary. This focus area is also interested in solutions that include artificial intelligence (AI), with a focus on the employment of AI to support providing care at the point of need in remote and austere environments. The following technical areas of interest are (not listed in order of importance):

- FA1.1 Control & Sustainment of Critical Organ System & Metabolic Function
- FA1.2 Enabling Medical Capabilities to Support En Route and Prolonged Care in Remote, Austere Settings, & Extreme Environments
- FA1.3 Prophylactic to Prevent Infection in Battlefield Wounds
- FA1.4 Control of Wound Progression & Infection Prevention
- FA1.5 Enabling capabilities to increase patient movement capacity





- FA1.6 Blood and Blood Products Next Generation Blood, Blood Products, Pharmaceuticals, Synthetic Replacements, & Delivery Systems
- FA1.7 Brain Trauma Treatment and Objective Diagnosis, Prognosis and Assessment of Traumatic Brain Injury (TBI) in combat and prolonged care scenarios
- FA1.8 Tactical Combat Casualty Care Point of Injury Control of Non-Compressible Hemorrhage & Immediate Cardiopulmonary Stabilization
- FA1.9 Cognition-sparing, long-duration pain control
- FA1.10 Large animal studies for the development of a portable non-pharmaceutical device that provides regional analgesia at the point of injury and/or during medical evacuation
- FA1.11 Automated Ultrasound Technology An automated ultrasound that is field portable with the capability of imaging abdomen, thoracic cavity, extremities, and pelvis. The prototype will also be capable of interpreting images and providing diagnostic feedback as well as having a semi-autonomous/autonomous guidance feature for surgical procedures.
- FA1.12 Burns Development of material and knowledge solutions to enable limited volume parenteral and/or enteral burn resuscitation in forward environments potentially under prolonged care
- FA1.13 Autonomy use of autonomy solutions in austere environments in PFC to help with resuscitation, stabilization, airway management, reduce major bleeding, help MEDICs in degraded environments, etc. to support autonomous care, Decision Support Systems, and/or Intelligent Evacuation and Prolonged Care
- FOCUS AREA #2: Medical Readiness: This area focuses on developing technologies that maximize medical readiness and provide mobile health solution sets for the modern Warfighter. Efforts may include diagnostics, treatments, Al-based advanced telehealth technologies, and training solutions to prevent or reduce injury and improve physiological and psychological health and resilience. This objective includes environmental health and protection including the assessment and sustainment of health and the operational effectiveness of Service members exposed to harsh operational environments including altitude, cold, heat, and exposure to environmental health. This focus area also includes medical readiness in response to infectious diseases encountered by service members during deployment and those that can significantly impact performance. The following technical areas of interest are (not listed in order of importance):
- FA2.1 Leader and Provider Tools to Prevent, Reduce, Screen and Diagnose Musculoskeletal Injury in all Settings
- FA2.2 Solutions to Accelerate Return-to-Readiness following Musculoskeletal Injuries
- FA2.3 Solutions to Sustain Warfighter Performance in Arctic and Other Extreme Environments
- FA2.4 Far Forward Psychological Health Care





FA2.5 Field Deployable Solutions to Prevent Degradation of Unit Performance and Soldier Psychological Health

FA2.6 Al Platform for the Early Identification and/or Management of Symptoms Associated with Post-traumatic Stress Disorder (PTSD) – The platform should allow for the integration of physiological data collected from a wearable device that can be used at home and on-demand. It should utilize audio-visual stimulation aimed to manage PTSD symptoms, include a remote monitoring app, and provide real-time data to both users and monitoring physicians. Testing of the prototype should be performed in a military or veteran population suffering from PTSD.

FA2.7 Medical Strategies to Sustain Soldier Alertness & Performance in all Settings

FA2.8 Guidelines and Recommendations on the Implementation of Human-Automation Teaming that Optimizes Human Performance and Increases Operational Effectiveness – The research should include a multi-day study in humans in a controlled environment to determine how task complexity, time on task, rest, and fatigue state (sleep loss and circadian misalignment) affect the Warfighter's ability to perform and interact with automation.

FA2.9 Pharmacological/Technological (P/T) Approaches to Measure & Manipulate the Glymphatic/Lymphatic (G/L) System in Humans during Sleep — Awardees will be expected to demonstrate that the G/L system can be reliably measured in humans during sleep and directly manipulated through P/T approaches; demonstrate efficacy of their approach to positively impact cognitive performance and psychological health outcomes; develop or adapt approaches to improve or enhance brain fluid movement in humans; and develop models that quantify the impacts of G/L clearance in the brain on short term impacts on the restorative effects of sleep.

FA2.10 Medical Criteria and brain injury-based thresholds for Informing Development of New Tactical Headborne Systems and personal protection equipment against blast, ballistic, and blunt trauma threats

FA2.11 Acute and Repetitive Blast Exposure Induced Brain Injury and Cognitive Health Models – The research should deliver blast-induced brain injury risk thresholds and probability risk curves for brain injury resulting from single and repetitive blast exposures. It should also lead to blast-induced brain injury criteria, test methodology, and an assessment tool that can be integrated into the Army's Health Hazard Assessment Program non-auditory blast overpressure risk model.

FA2.12 Medically-based Criteria for Body Armor Fielded for Future Development and Evaluation of Next Generation PPE – Awardees will be expected to develop and conduct, in cooperation with DoD laboratories, novel research to characterize physiological response (e.g., vital organ injury) and torso impact parameters under military-relevant exposures, using mechanical, cadaveric, or animal surrogates. The researchers should leverage existing computational models of the torso, as well as existing and emerging clinical data and emerging field data on torso injuries being collected by the DoD, law enforcement community, industry, academia, etc.

FA2.13 Infectious Diseases – Rapid Diagnostic and Detection Devices

FA2.14 Prophylactic for Endemic Diarrheal Diseases





FA2.15 Broad Spectrum Antivirals

FA2.16 Broadly protective vaccine platforms for Emerging Infectious Diseases

FA2.17 Novel, adaptive, and tailored simulation education trainings that optimize practice and effectiveness (i.e., brain focused and learning retention)

FOCUS AREA #3: Emerging Technologies: This area is focused on the Multi-Domain Battle, an operational environment involving greater dispersion and near isolation over great distances, which is likely to cause severe restrictions on mobility for medical missions and shortfalls in both human and materiel human resources due to area denial challenges. Combat units will need to be more self-sufficient and less dependent on logistical support. Combatant commanders with increased sick or wounded Soldiers will face degradation of medical resources and encumbered combat effectiveness without new combat casualty management and Force multiplication strategies. This focus area is searching for emerging technologies that will increase medical mobility while ensuring access to essential medical expertise and support regardless of the operating environment. The following technical areas of interest are (not listed in order of importance):

FA3.1 Al for information and technology – focus on employment of Al to support medical resupply in theater to improve real-time information access, security and mobility; interoperable data capture and documentation technologies

FA3.2 Synthetic Biology – general interest as well as cell & therapeutics, diagnostics, detection platforms

FA3.3 Casualty Management – Next generation casualty management, medical logistics, training and education, and medical command and control in dispersed operations and other theater/operational environments.

FA3.4 Human Machine Integration Best Practices and Trust – Efficacy of integrating robotics into the far forward mission that consider best practices to encourage trust by the user. Understanding the extent to which Warfighters may trust robots and how to achieve this capability.

FA3.5 Nano, micro, and macro interoperable haptic platforms – This aspect of performing Live, Virtual, Augmented, and Gaming education tools is limited by the ability to experience force and real life tactile sensations especially in the medical field. The limiting factor in realistic environments is the ability to provide this factor to assist in cognitively remembering and understanding how the action should feel to be correct. Haptic gloves available utilize wires and limit the perimeter because the user is tethered.

FOCUS AREA #4: Maximizing Human Potential: This technology area aims to develop effective countermeasures against military-relevant stressors and to prevent physical and psychological injuries during training and operations in order to maximize the human potential, in support of the Army Human Performance Optimization and Enhancement, Human Dimension, Multi-Domain Battle, and the DoD Total Force Fitness concepts. The following technical areas of interest are (not listed in order of importance):





FA4.1 Maximizing Human Potential - cognitive, physical and emotional potential in multi-domain operations (MDO) by optimizing physical and psychological health and resilience and provide safe, impactful, and ethical human performance; optimizing the interactions between systems and Soldiers, leaders, and teams

FA4.2 Solutions to Maximize Warfighter and Family Member Psychological Health and Resilience to Stressors

FA4.3 Repair, restore, preserve and maintain sensory system (e.g., vision, hearing, balance) function after combat related threats (including but not limited to directed energy exposure). Seeking research efforts to support the development of innovative strategies and technologies that may include medical devices, pharmaceuticals, rehabilitation strategies, and regenerative medicine-based approaches, to treat, restore, and preserve spared tissue and function, and/or rehabilitate patients due to neurosensory related trauma.

FOCUS AREA #5: Applied Medical Robotics and Machine Perception and Intelligence Systems: This technology area focuses on investigation of novel technologies and methods of applying robotics to augment medical capability and capacity in forward care settings. The specific technologies include machine perception and intelligence systems, and advanced motion planning and control of semi-autonomous robotics. The target applications include the use of tele-surgical robotics to extend the reach of remote surgeons, and robotic-assisted casualty monitoring, diagnostics, and intervention to assist local care providers in combat casualty care situations. This technology area also focuses on leveraging unmanned air and ground systems to provide standoff detection and remote assessment of combat causalities to facilitate rapid casualty extraction, and to provide emergency medical resupply to support field care when evacuation is not possible. The following technical areas of interest are (not listed in order of importance):

FA5.1 Machine Perception Systems for robotic-assisted diagnostics and interventions – The development and integration of computer vision techniques to locate, segment, and map key anatomical features that enable the use of robotic systems to assist in interventions. Applications include the development of safety protocols for telerobotic surgery and robotic-assisted diagnostic imaging.

FA5.2 Standoff Casualty Detection, Assessment, Monitoring – the development and integration of image processing algorithms using common sensors as input to provide casualty detection and remote assessment at standoff distances. Applications include integration with vision systems on common robotic or manned vehicles platforms.

FA5.3 Unmanned Aerial System (UAS) supply of critical medical supplies to the tactical edge – The use emerging unmanned vehicle platforms for medical resupply to support field care and other medical logistics missions in austere operating environments. Applications include the rapid distribution of vaccines and test kits to support pandemic response in remote and high-threat environments.

FA5.4 Medic/Robot Teaming – The development and integration of techniques that allow forward care providers to effectively team with robotic or semi-autonomous systems. Applications include supervisory-level command and control of semi-autonomous robotics, or





systems designed to automate data entry for existing or emerging Medic tools, e.g. patient documentation or clinical decision support systems.

Scope of Work

The Period of Performance (PoP) should be focused on tasks relevant to advance the prototype to the next TRL or KRL.

Potential Follow-on Tasks

There is the potential for award of one or more non-competitive follow-on tasks based on the success of the project (subject to change depending upon Government review of completed work and successful progression of milestones). Potential follow-on work may be awarded based on the advancement in prototype maturity during the PoP. Follow-on work may include tasks related to advancement of prototype maturity, and/or to expand the use or utility of the prototype.

Potential Funding Availability and PoP

The funding amount and PoP for this RPP is unspecified (with the exceptions detailed below), and the number of awards is indeterminate and contingent upon funding availability. Selection of prototype projects is a highly competitive process and is based on the evaluation of the proposal's technical merit, programmatic considerations, and the availability of funds. Awards resulting from this RPP are expected to be made in Fiscal Years 2021 and 2022 under the authority of 10 U.S.C. § 2371b.

The funding limitations per Enhanced White Paper are as follows:

Focus Area 1.10 - The maximum request for Government funding for each Enhanced White Paper should not exceed \$1.4 M for projects proposing in response to Focus Area 1.10.

Focus Area 2.6 - The maximum request for Government funding for each Enhanced White Paper should not exceed \$511 K for projects proposing in response to Focus Area 2.6. The USG anticipates funding this focus area with FY20 funds, where awards will be made no later than September 30, 2021.

Focus Area 2.8 - The maximum request for Government funding for each Enhanced White Paper should not exceed \$781 K for projects proposing in response to Focus Area 2.8. The USG anticipates funding this focus area with FY20 funds, where awards will be made no later than September 30, 2021.

Focus Area 2.9 - The maximum request for Government funding for each Enhanced White Paper should not exceed \$4.3 M for projects proposing in response to Focus Area 2.9. The USG anticipates funding this focus area with FY20 funds, where awards will be made no later than September 30, 2021.

Focus Area 2.11 - The maximum request for Government funding for each Enhanced White Paper should not exceed \$3 M for projects proposing in response to Focus Area 2.11. The USG anticipates funding this focus area with FY20 funds, where awards will be made no later than September 30, 2021.





Focus Area 2.12 - The maximum request for Government funding for each Enhanced White Paper should not exceed \$1.4 M for projects proposing in response to Focus Area 2.12. The USG anticipates funding this focus area with FY20 funds, where awards will be made no later than September 30, 2021.

Focus Area 5 (all technical areas of interest) – The maximum request for Government funding for each Enhanced White Paper should not exceed \$600,000 for projects proposing in response toany of the technical areas of interest within Focus Area #5. Additional funding may be available for selected performer(s) for the continuation of prototype development under a subsequent period(s) of performance of the resultant award(s).

For all other Focus Areas not explicitly listed above – There are no specified funding limitations identified for an Enhanced White Paper submitted under this RPP. For informational purposes, the average award size of MTEC awards for the initial PoP is approximately \$1.5 - 3M\$ over a 2 - 3 year PoP.

Cost sharing, including cash and in kind (e.g., personnel or product) contributions are strongly encouraged, have no limit, and are in addition to the Government funding to be provided under the resultant award(s).

Acquisition Strategy

This RPP will be conducted using the Enhanced White Paper approach. In Stage 1, current MTEC members are invited to submit Enhanced White Papers using the mandatory format contained in this RPP (see Section 8 of this RPP). The Government will evaluate Enhanced White Papers submitted and will select those that best meet their current technology priorities using the criteria in Section 5 of this RPP. Offerors whose proposed solution is selected for further consideration based on the Enhanced White Paper evaluation will be invited to submit a full cost proposal in Stage 2. Notification letters will contain specific Stage 2 proposal submission requirements.

For more information regarding the requirements of the Enhanced White Paper process and template, refer to the RPP.

MTEC

The MTEC mission is to assist the USAMRDC by providing cutting-edge technologies and supporting effective materiel life cycle management to transition medical solutions to industry that protect, treat, and optimize Warfighters' health and performance across the full spectrum of military operations. MTEC is a biomedical technology consortium collaborating with multiple government agencies under a 10-year renewable Other Transaction Agreement (OTA), Agreement No. W81XWH-15-9-0001, with the U.S. Army Medical Research Acquisition Activity (USAMRAA). MTEC is currently recruiting a broad and diverse membership that includes representatives from large businesses, small businesses, "nontraditional" government contractors, academic research institutions, and not-for-profit organizations.





Administrative Information

Enhanced White Papers may be submitted at any time during the submission period but no later than the due date and time specified on the cover page using BIDS: Caution-

https://ati2.acqcenter.com/ATI2/Portal.nsf/Start?ReadForm < Caution-

https://protect2.fireeye.com/v1/url?k=899aa642-d6019cf2-899da196-0cc47a31ce0a-

978df4a7f2591dd2&q=1&e=4a8737ab-a86d-4912-bf6a-

3770bea3f004&u=https%3A%2F%2Fati2.acqcenter.com%2FATI2%2FPortal.nsf%2FStart%3FR eadForm > .The BIDS system will open for submissions on April 20, 2021. The RPP is posted to the MTEC website (mtec-sc.org) and a notice is posted onCaution-www.beta.SAM.gov < Caution-http://www.beta.SAM.gov > to notify interested parties. MTEC membershipis required for the submission of an Enhanced White Paper in response to this MTEC RPP. To join MTEC, please visitCaution-http://mtec-sc.org/how-to-join/ < Caution-

https://protect2.fireeye.com/v1/url?k=b1617a35-eefa4085-b1667de1-0cc47a31ce0a-aa85061a80e9fad6&q=1&e=4a8737ab-a86d-4912-bf6a-

3770bea3f004&u=http%3A%2F%2Fmtec-sc.org%2Fhow-to-join%2F >

MTEC intends to host multiple Proposers Conferences that will be conducted via webinar within several weeks of the release of the RPP and may include up to six (6) separate sessions. Further instructions will be forthcoming via email.

Points of Contact

Please direct your inquiries and correspondence to the following contacts:

Questions concerning contractual, cost or pricing related to this RPP should be directed to the MTEC Contracts Administrator at mtec-contracts@ati.org

Technical and membership questions – Dr. Lauren Palestrini, MTEC Director of Research, <u>lauren.palestrini@mtec-sc.org</u>

Administrative questions – Ms. Kathy Zolman, MTEC Director of Program Operations, kathy.zolman@ati.org

To view this solicitation,

https://protect2.fireeye.com/v1/url?k=c971c9de-96eaf36e-c976ce0a-0cc47a31ce0a-385238bafe539a51&g=1&e=4a8737ab-a86d-4912-bf6a-

3770bea3f004&u=https%3A%2F%2FCaution-www.mtec-sc.org%2Fsolicitations%2F





NIH Funding Opportunities Specific to COVID-19

Title	Notice Number	Organization(s)	Release Date	Expiration Date
Notice of Special Interest (NOSI): The Influence of Host Resilience on Heterogeneity of Acute Respiratory Distress Syndrome/Acute Lung Injury (ARDS/ALI)	NOT- HL-20- 814	<u>NHLBI</u>	15-Sep- 20	6-Jul-24
Notice of Special Interest (NOSI): Availability of Emergency Awards for Limited Clinical Trials to Evaluate Therapeutic and Vaccine Candidates Against SARS-CoV-2	NOT-AI- 20-065	<u>NIAID</u>	13-Aug- 20	1-Sep-21
Notice of Special Interest (NOSI): Simulation Modeling and Systems Science to Address Health Disparities	NOT- MD-20- 025	NIMHD, NCI, NI DA, NLM, ODP, OBSSR, NIMH, NIAMS	13-Aug- 20	8-May-23
Notice of Special Interest (NOSI): NIDCD is Interested in Supporting Research on the Impact of COVID-19 on Mission Specific Sensory and Communication Disorders	NOT- DC-20- 008	NIDCD	4-Jun- 20	8-Sep-22
Notice of Special Interest (NOSI): Select Research Areas for Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and Coronavirus Disease 2019 (COVID-19)	NOT-AI- 20-051	NIAID	19-May- 20	8-Sep-21
Notice of Special Interest (NOSI) regarding the Availability of Urgent Competitive Revisions for Research on Coronavirus Disease 2019 (COVID-19) and the Causative Virus SARS-CoV-2	NOT- GM-20- 025	<u>NIGMS</u>	25-Mar- 20	6-Feb-21





Emergency Competitive Revision	PA-20-	NIH, NCATS, N	10-Mar-	8-Sep-25
to Existing NIH Awards	<u>135</u>	CCIH, NCI, NHG	20	
(Emergency Supplement - Clinical		RI, NIA, NIAAA,		
Trial Optional)		NIAID, NIAMS,		
		NIBIB, NICHD,		
		NIDCD, NIDDK,		
		NIEHS, NIGMS,		
		NIMH, NIMHD,		
		NINR, NLM, OR		
		WH, OSC		
		,		

Continuously Open Announcements:

Special Operations Forces (SOF) open Broad Area Announcement (BAA) for USSOCOM Biomedical Research Advisory Group (BRAG) to fund biomedical, human performance, and canine research to identify and develop techniques, knowledge products, and materiels (medical devices, drugs, and biologics) for early intervention in life-threatening injuries, prolonged field care (PFC), human performance optimization, and canine medicine/performance. SOF medics place a premium on medical equipment that is small, lightweight, ruggedized, modular, multiuse, and designed for operation in extreme environments. For more information: https://www.grants.gov/web/grants/search-grants.html?keywords=W81XWH-USSOCOM

711 HPW BAA: The Airman Readiness Medical Research (ARMR) Hybrid Broad Area Announcement (BAA) was just released to solicit White Papers under this announcement with the focus of conducting medical research in support of optimizing the warfighter by enabling, enhancing, restoring, and sustaining the Airman to more effectively execute the Air Force mission. This medical research objective is dual natured: (1) ensure medical availability of Airmen by analyzing attributes (sensory, behavioral, physiologic) and operational environments (chemical, physical, psychological, biological, radiological stressors) to drive optimal performance of Airmen engaged in high-demand, high-impact mission tasks (2) investigate how the flight environment affects the process of life, the ability to maintain homeostasis, and the risk for injury or secondary insult, seeking to ameliorate these stressors to optimize Airman health and performance. This BAA will remain open for seventy-two (72) months with Calls being released throughout the seventy-two (72) month period of performance.

Link:

https://beta.sam.gov/opp/31a536d407cd4d519fc89ffd3366cbb3/view?keywords=%2 2Airman%20Readiness%20Medical%20Research%20(ARMR)%22&sort=relevance &index=&is active=true&page=1





The United States Army Medical Research and Development Command (USAMRDC) funds a broad range of extramural research programs. Awards are usually contracts, grants, or cooperative agreements. Research proposals can be submitted to the command through the USAMRMC Broad Agency Announcement (BAA), which is continuously open, or through special USAMRMC BAA Announcements, which are open for limited timeframes. Examples of programs with special announcements are the Breast Cancer Research Program, the Prostate Cancer Research Program, Gulf War Illness, and others. Additional information, the USAMRMC Broad Agency Announcement, and open special USAMRMC BAA Announcements can be obtained at http://www.usamraa.army.mil/Pages/BAA.aspx

USAMRMC also maintains a safe method for submitting new products and ideas for consideration: https://mrmc-npi.amedd.army.mil/; provides subject matter experts to assess products and ideas, evaluate their applicability to USAMRMC's mission, and provide feedback to the submitter for development and possibly funding.